Waste Reduction Goal Task Force
BRIEFING PAPER
For
Existing Waste Reduction and Diversion Goals

Background:
The goal of the Solid Waste Management Act is to reduce by 25% the amount of solid waste disposed of at Class I municipal solid waste disposal facilities and incinerators, measured on a per capita basis, by weight. This goal shall apply to each municipal solid waste region but not to individual disposal facilities. For computing this reduction, 1995 was established as the base year with 2003 as the goal year. This method compares the per capita solid waste disposal for the base year with that disposal for the goal year to determine the percentage of reduction.

As an alternative to calculating the solid waste reduction and diversion on the per capita basis, regions are given the option of computing their goal by an *economic growth method,* using the Population Economic Ratio, prescribed by the Department, approved by the Municipal Solid Waste Advisory Committee, and promulgated as a rule in accordance with the provisions of the Uniform Administrative Procedures Act. This method takes into consideration the region's economic information obtained from the University of Tennessee's Center for Business and Economic Research, which includes taxable sales, employment, and consumer price index, and census data from population estimates provided by the U.S. Census Bureau.

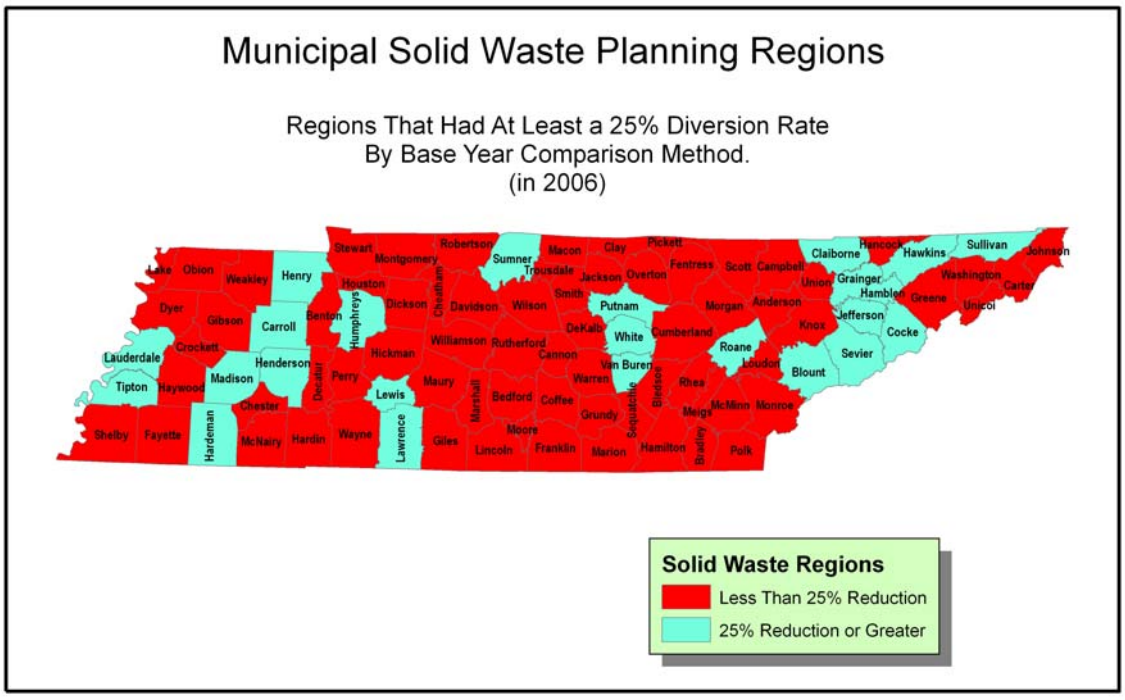
If a region does not meet the twenty-five percent waste reduction and diversion goal by either of the foregoing methods, the Department will objectively assess the activities and expenditures of the region to determine whether the region's solid waste reduction programs are qualitatively equivalent to that of other regions that are meeting the goal, and whether failure is due to factors beyond the control of the region. The first step of a "qualitative assessment" employs a "real time" methodology for further determining attainment of the goal. This method compares the region's total solid waste generation (disposal plus diversion) for the reporting year with the amount of the waste going into Class I landfills during the same year to determine the per cent of reduction.

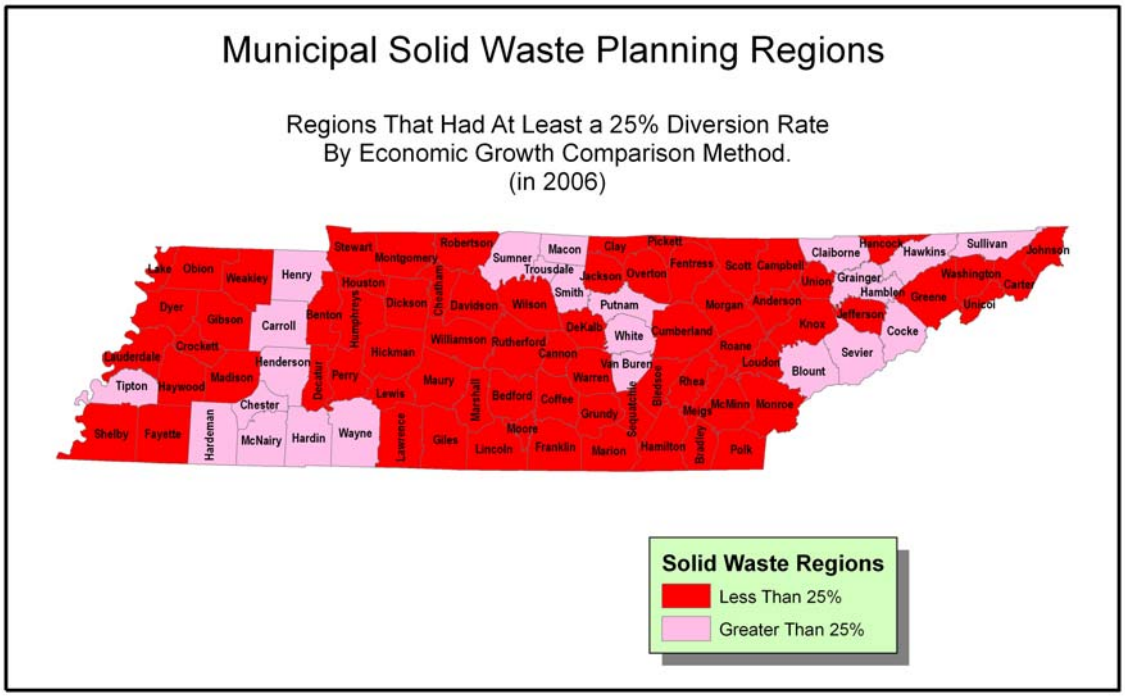
Those regions not meeting the goal by either of the above methods will proceed to the full qualitative review process in an attempt to establish compliance.

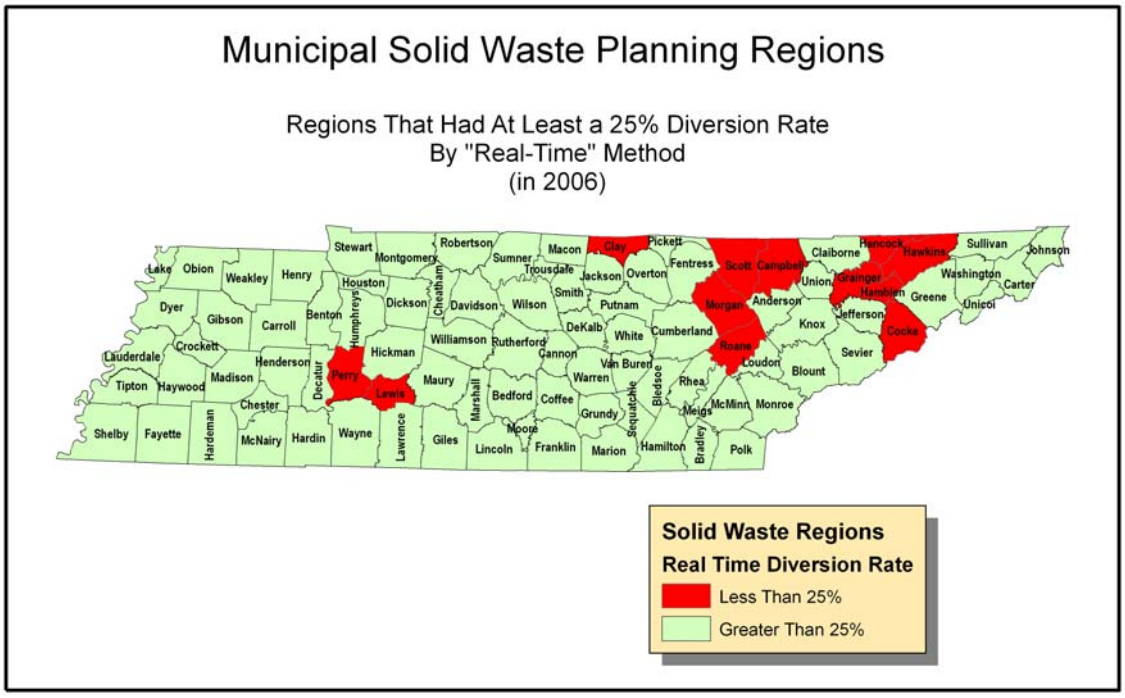
Discussion:
Where a region accurately reported its 1995 base year (B/Y) Class I disposal numbers and has an established recycling/waste diversion program, a 25% waste reduction, utilizing the PER CAPITA method, should be attainable. Should there have been a serious fluctuation in population and/or economics, it may be to a region's advantage to use the ECONOMIC GROWTH method to compute its waste reduction percentage, as this method takes into consideration such variables as taxable sales, employment, population, and consumer price index. Another method, referred to above as the first step in a qualitative assessment, is "REAL TIME". This method determines the waste reduction percentage by dividing the Class I disposal numbers by the total generation (Class I disposal **plus** recycling and other diversion) numbers for a given year. Since the Real Time method does not consider base year, population, or economics in its

computation, it sometimes can be helpful to a region where base year numbers, etc., may be in question.

Below are maps showing the regions that have waste reduction levels of 25% or more based upon each of the calculation methods:







Below is a table outlining the 2006 waste reduction data from each county and Solid Waste Planning Region. Disposal and Diversion numbers are in Tons. Negative Percentages reflect that waste per capita, with or without economic growth factored in depending upon the column, has increased since the 1995 base year. Class I Disposal Per Capita is the number of tons on average each Tennessean produced in 2006. All values are from the 2006 Annual Progress Report as reviewed by TDEC staff.

Region	County	2006 Class I Disposal	2006 Diversion	Current Year Population	Per Capita	Economic Growth	Real Time	Class I Disposal Per Capita
Anderson	**Anderson**	70,572	36,496	73,579	3%	-9%	34%	0.96
Bedford	**Bedford**	30,689	25,115	43,413	23%	21%	45%	0.71
Benton	**Benton**	16,500	14,511	16,378	-52%	-77%	47%	1.01
Southeast		**619,736**	**360,573**	**584,920**	14%	10%	37%	1.06
	Bledsoe	4,847	142	13,030			3%	0.37
	Bradley	95,884	68,759	93,538			42%	1.03
	Grundy	6,535	319	14,499			5%	0.45
	Hamilton	380,861	251,531	312,905			40%	1.22

	Marion	22,275	12,000	27,942			35%	0.80
	McMinn	62,417	22,201	52,020			26%	1.20
	Meigs	6,916	778	11,698			10%	0.59
	Polk	7,003	627	15,939			8%	0.44
	Rhea	29,421	789	30,347			3%	0.97
	Sequatchie	3,577	3,428	13,002			49%	0.28
Blount	**Blount**	68736	71,742	118,186	64%	63%	51%	0.58
Campbell	**Campbell**	25,678	5,688	40,848	-73%	-83%	18%	0.63
Carroll	**Carroll**	20,570	17,681	29,096	34%	27%	46%	0.71
Central		**427,710**	**234,077**	**333,918**	-24%	-27%	35%	1.28
	Cannon	5,911	3,874	13,448			40%	0.44
	Coffee	59,269	10,578	51,625			15%	1.15
	Rutherford	333,122	162,426	228,829			33%	1.46
	Warren	29,408	57,199	40,016			66%	0.73
Cheatham	**Cheatham**	18,230	43,061	39,018	18%	20%	70%	0.47
Claiborne	**Claiborne**	15,017	10,008	31,347	43%	40%	40%	0.48
Clay	**Clay**	5,870	1,488	8,055	-47%	-75%	20%	0.73
Cocke	**Cocke**	20,879	5,521	35,220	55%	53%	21%	0.59
C-D-G		**99,411**	**198,061**	**100,739**	-2%	-17%	67%	0.99
	Crockett	9,964	38,758	14,392			80%	0.69
	Dyer	52,101	98,586	37,886			65%	1.38
	Gibson	37,346	60,717	48,461			62%	0.77
Cumberland	**Cumberland**	45,567	35,983	52,344	13%	10%	44%	0.87
Davidson	**Davidson**	800,830	571,168	578,698	24%	21%	42%	1.38
Decatur	**Decatur**	8,580	2,945	11,426	-20%	-37%	26%	0.75
DeKalb	**DeKalb**	35,234	16,547	18,360	-86%	-94%	32%	1.92
Dickson	**Dickson**	50,090	57,960	46,583	-41%	-41%	54%	1.08
Fayette	**Fayette**	20,667	11,377	36,102	-31%	-28%	36%	0.57
Fentress	**Fentress**	9,698	6,141	17,480	4%	-1%	39%	0.55
Grainger	**Grainger**	7,442	2,087	22,453	67%	64%	22%	0.33
Greene	**Greene**	67,978	100,919	65,945	19%	13%	60%	1.03
Hamblen	**Hamblen**	92,237	28,469	61,026	31%	26%	24%	1.51
Hancock	**Hancock**	2,811	32	6,713	14%	10%	1%	0.42
Hardeman	**Hardeman**	18,471	7,412	28,176	39%	35%	29%	0.66
Hawkins	**Hawkins**	41,913	3,796	56,850	34%	27%	8%	0.74
Haywood	**Haywood**	15,112	37,165	19,405	10%	2%	71%	0.78

Henderson	**Henderson**	17,092	30,889	26,750	57%	53%	64%	0.64
Henry	**Henry**	18,261	20161	31,837	43%	37%	52%	0.57
Hickman	**Hickman**	8,976	15,113	23,812	9%	-1%	63%	0.38
Houston	**Houston**	4,136	19,832	8,076	-1%	6%	83%	0.51
Humphreys	**Humphreys**	16,815	35,864	18,394	29%	23%	68%	0.91
Interlocal		**103,818**	**76,709**	**103,316**	15%	3%	42%	1.00
	Franklin	49,022	35,465	41,319			42%	1.19
	Giles	23,849	21,540	29,269			47%	0.81
	Lincoln	30,947	19,705	32,728			39%	0.95
Jackson	**Jackson**	6,524	6,812	10,918	-27%	-50%	51%	0.60
Jefferson	**Jefferson**	26,327	12,612	49,372	26%	21%	32%	0.53
Knox	**Knox**	497,585	790,879	411,967	6%	6%	61%	1.21
Lake	**Lake**	4,257	3,045	7,406			42%	0.57
Lauderdale	**Lauderdale**	19,533	22,119	26,732	29%	17%	53%	0.73
Lawrence	**Lawrence**	25,219	15,924	40,934	35%	23%	39%	0.62
Lewis	**Lewis**	6,311	1,663	11,588	30%	21%	21%	0.54
Loudon	**Loudon**	105,008	84,283	44,566	23%	24%	45%	2.36
Madison	**Madison**	128,084	428,556	95,894	39%	-4%	77%	1.34
Marshall-Maury		**225,764**	**159,042**	**107,193**	-14%	-1%	41%	2.11
	Marshall	22,309	4,387	28,884			16%	0.77
	Maury	203,455	154,655	78,309			43%	2.60
Monroe	**Monroe**	32,256	85,956	44,163	12%	6%	73%	0.73
M-R-S		**197,462**	**455,194**	**222,299**	-23%	-16%	70%	0.89
	Montgomery	152,745	259,889	147,114			63%	1.04
	Robertson	37,027	192,874	62,187			84%	0.60
	Stewart	7,690	2,431	12,998			24%	0.59
Moore	**Moore**	3,220	35,960	6,070	-96%	-97%	92%	0.53
Morgan	**Morgan**	9,164	2,700	20,108	6%	-2%	23%	0.46
North Central		**33,465**	**71,429**	**48,290**	-4%	25%	68%	0.69
	Macon	8,925	12,623	21,726			59%	0.41
	Smith	20,992	56,814	18,753			73%	1.12
	Trousdale	3,548	1,992	7,811			36%	0.45
Northeast		**236,613**	**86,264**	**209,179**	-38%	-38%	27%	1.13
	Carter	44,196	48,944	59,157			53%	0.75
	Johnson	8,482	546	18,043			6%	0.47
	Unicoi	17,969	1,562	17,663			8%	1.02

	Washington	165,966	35,212	114,316			18%	1.45
Obion	**Obion**	47,289	61,666	32,184			57%	1.47
Overton	**Overton**	11,254	17,672	20,740	-32%	-36%	61%	0.54
Perry	**Perry**	10,745	1,102	7,653	-48%	-55%	9%	1.40
Pickett	**Pickett**	3,201	10,170	4,855	-64%	-66%	76%	0.66
Putnam	**Putnam**	53,942	30,606	68,284	61%	62%	36%	0.79
Roane	**Roane**	59,217	6,513	53,293	10%	0%	10%	1.11
Scott	**Scott**	28,447	2,754	21,926	-60%	-69%	9%	1.30
Sevier	**Sevier**	9,648	181,739	81,382	94%	94%	95%	0.12
Shelby	**Shelby**	1,521,855	1,128,258	911,438	7%	2%	43%	1.67
Shiloh		**47,560**	**169,807**	**84,682**	4%	32%	78%	0.56
	Chester	5,753	6,548	16,043			53%	0.36
	Hardin	21,918	27,605	26,089			56%	0.84
	McNairy	10,825	31,558	25,722			74%	0.42
	Wayne	9,064	104,096	16,828			92%	0.54
Sullivan	**Sullivan**	178,168	115,922	153,239	29%	25%	39%	1.16
Sumner	**Sumner**	66,061	109,062	149,416	76%	76%	62%	0.44
Tipton	**Tipton**	31,868	38,422	57,380	43%	38%	55%	0.56
Union	**Union**	10,803	6,563	19,086	-24%	-26%	38%	0.57
Van Buren	**Van Buren**	1,167	680	5,448	32%	27%	37%	0.21
Weakley	**Weakley**	17,377	24,146	33,357			58%	0.52
White	**White**	15,477	7,599	24,482	35%	26%	33%	0.63
Williamson	**Williamson**	164,669	156,430	160,781	-33%	-25%	49%	1.02
Wilson	**Wilson**	104,612	131,704	104,035	-12%	-2%	56%	1.01
Statewide	**Statewide**	6,765,480	6,567,843	6,038,803	17%	13%	49%	1.12

Below is a map showing those 5 regions currently under qualitative review.

Issues:
To Be Determined By Task Force

Focus Questions:

1. **Is the waste reduction goal necessary? If so, should there be incentives for achieving the goal?**
2. **Does the state need a goal (waste reduction versus recycling)? If so, should this be a statewide goal only (not calculated on a region by region basis)?**
3. **In focusing on a specific numerical goal overshadowing the larger intent of the Act of having a progressive, integrated solid waste management program (which in itself probably result in high waste reduction and recycling rates)?**
4. **Does the state's qualitative assessment criteria sufficiently evaluate each MSW planning region's integrated solid waste management program?**
5. **Should there be a regulatory review board (or procedure) in determining compliance with the Act (not only the waste reduction goal, but also the region's integrated solid waste management programs)? Should there be required enforcement mechanisms as well as assistance to non-complying regions/solid waste districts/counties/cities?**